REMARKS

The applicant requests reconsideration of the rejection of claims 1-30 as obvious, for the following reasons.

The invention of this application concerns the transmission of a digital wrapper frame intended for transmission over optical links at bits rates up to 10 GHz over a number of lower bandwidth channels such as serial backplane lines by distributing frame alignment bytes from the digital wrapper into the lower bandwidth channels in order to synchronize transmission of the wrapped frame through the lower bandwidth channels.

Claims 1, 3, 4, 7-11, 13-16, 18-26, and 28-30 are rejected for obviousness over US 2002/0097752 ("Jones") in view of US Patent 6625176 ("Amann"). The rejection is respectfully traversed for the following reasons.

According to claim 1, a distributed data frame structure for the transmission of data frames over *N* channels in which each data frame is represented by *L* bytes, includes:

"*N* subframe structures, each corresponding to one of said channels;

the *L* bytes representing each data frame being rotatably deinterleaved into successive groups of bytes distributed to said subframe structures;

the rotation of deinterleaving for each data frame beginning at a subframe structure different from the subframe structure at which the rotation of deinterleaving began for the previous data frame; and,

a frame alignment signal comprising a pattern of bits, said frame alignment signal occurring every *L* bytes *in each of said subframe structures*."

As emphasized by the italics in the quoted passage, a frame alignment signal is present in each subframe structure as the rotating deinterleaving of frames over the N channels proceeds.

As admitted in the Office Action at page 2, paragraph 4, Jones does not teach that data frames may be rotationally deinterleaved. Nevertheless, at page 2, paragraph 5, the Office Action asserts that modification of Jones by use of rotational deinterleaving as taught by Amann would be obvious to one of ordinary skill in the art, without giving proof of any teaching suggesting why this would be obvious. In fact, the incorporation of rotational deinterleaving into Jones is not suggested by the prior art, for an important technical reason.

Jones' communications system uses N channels to deinterleave a frame into N-1 channels, reserving the Nth channel "for facilitating deskewing and word framing." See Jones at paragraph [0012], for example. This limitation is intentional, for Jones' invention is an improvement on a design published by Nortel that establishes a "reference lane" in parallel with parallel communications channels that carry communications. The reference lane supports a sequence of bit groups in which each bit group is used to align communications in a respective one of the communications channels. See paragraph [0010] of Jones. Manifestly, Jones' description is explicitly limited to transmission of frame alignment signals to one dedicated channel, and therefore teaches away from any modification that would place a "frame alignment signal" every *L* bytes "in each of said subframe structures." Moreover, deletion of the single channel dedicated to frame alignment would substantially change a fundamental principle of Jones' system. Therefore, even if Amann teaches deinterleaving a frame and inserting a frame alignment signal into each of N subframe structures, as stated in the Office Action, it cannot be combined with Jones for the reasons given. Accordingly, the rejection of claims 1, 3, 4, 7-11, 13-16, 18-26, and 28-30 for obviousness over Jones in combination with Amann must be withdrawn.

Further, the obviousness rejections of claims 2, 5, 12, 17, and 27 and claim 6 must be withdrawn for the same reasons.

In view of these remarks, it is submitted that all of the claims in this application are patentably distinguishable from the references of record, early notice of which is earnestly solicited.

Respectfully submitted,

Terrance A. Meador

Date: October 25, 2006

TERRANCE A. MEADOR
Reg. No. 30, 298

INCAPLAW
1050 Rosecrans Street, Suite K
San Diego, CA 92106

Telephone: (619) 222-2531 Fax: (619) 222-2327